

REMARKS

Claims 1-8 and 12-16 are pending in the present application. Claims 1 and 8 have been amended and claims 9-11 have been canceled. No new matter has been added.

Figure 1 and 2 have been objected to because Applicant inadvertently failed to provide the new figures that were discussed in the previous amendment. These figures are provided herewith.

The amendment filed September 8, 2008 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. In particular, the Examiner objected to the term "non-inert" that was added to claim 1 in the previous amendment. As indicated by the Examiner, the original filing discloses the substrate is etchable with fluorine. In response, claim 1 has been amended to recite that the substrate is "etchable by dry etching using fluorine chemistry." This limitation is clearly supported.

Claims 1-7 and 12-16 have been rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. In view of the amendment discussed above, this rejection is now moot.

Claims 8, 9 and 11 have been rejected under 35 U.S.C. § 102(e) as being anticipated by Kubena, *et al.* (U.S. Patent No. 6,580,138, hereinafter "Kubena") and claim 10 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Kubena, in view of Lei, *et al.* (U.S. Patent No. 7,279,369, hereinafter "Lei"). Applicant respectfully traverses these rejections.

Claim 8 has been amended herein to include the limitations of claims 10 and 11. Accordingly, claim 8 now recites that "the etch stop layer [comprises] a substantially non-

conducting, fluorine chemistry inert material that is inert again chemical dry etching using fluorine chemistry and the substrate [is] etchable with fluorine chemistry, wherein said etch stop layer comprises HfO_2 , ZrO_2 , Al_2O_3 or TiO_2 and wherein the substrate is a silicon substrate." Applicant respectfully submits that the references of record do not teach or suggest the limitations of claim 8.

Lei discloses a GOI (germanium-on-insulator) substrate comprising a dielectric (see col. 8, lines 33-36) between an epitaxial Ge layer and another undisclosed semiconductor substrate, the dielectric being used as an insulator only. This layer is interesting in view of its electrically insulating properties "because the insulating layer in the semiconductor substrate helps reducing current leakage in the semiconductor devices" (see col. 1, lines 23-28).

Lei neither mentions an etch stop layer nor that the insulating layer may be used as an etch stop. As possible applications for a GOI substrate there is mention of MOS (metal oxide semiconductor) transistors, optical detectors, and optoelectronic devices. Hence, Lei does neither provide an etch stop layer nor a MEMS device. Further, the document fails to mention a silicon substrate in connection with the insulating layer.

Kubena discloses a MEMS device and a method for making a micro mechanical switch. A preferred substrate for the MEMS is an SOI (silicon on insulator) substrate comprising a SiO_2 layer between two monocrystalline silicon wafers bonded together. The SiO_2 layer is mentioned to be an etch stop layer. But only in col. 7, lines 30-33, the purpose of the etch stop layer is given. The SiO_2 layer functions as an etch stop during dissolving the first silicon wafer. Dissolving can only be understood to use a solvent or at

least a liquid for etching. There is no etch stop layer disclosed which can be used while using a chemical dry etch with fluorine chemistry.

Thus, a combination of both cited documents can not make obvious a MEMS device carrying an etch stop layer as newly claimed in amended claim 8. No hint is given which kind of layer may be appropriate for use as an etch stop against dry etch with fluorine. Hence, we believe that the rejection of claim 8 will be overcome by the proposed combined claim.

In view of the above, Applicant respectfully submits that this response complies with 37 C.F.R. § 1.116. Applicant further submits that the claims are in condition for allowance. No new matter has been added by this amendment. If the Examiner should have any questions, please contact Applicant's attorney at the number listed below. The Commissioner is hereby authorized to charge any fees that are due, or credit any overpayment, to Deposit Account No. 50-1065.

Respectfully submitted,



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2/13/05

Date

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